IN THE CLAIMS

Please amend the claims to be in the form as follows:

1. (Currently amended) A method of embedding auxiliary data (K) in an information signal (P), comprising the steps of:

- shifting one or more predetermined watermark patterns (W2) one or more times over a vector (k), the respective vector(s) being indicative of said auxiliary data (K); and

- embedding said shifted watermark(s) (W2') in said information signal, wherein the embedded watermark has dimensions less than the dimension of the information signal, and the step of embedding comprises repeating said watermark substantially over the extent of the information signal.

2. (Original) A method as claimed in claim 1, including the step of further embedding the predetermined watermark (W2) to provide a reference for said vector (k).

3. (Original) A method as claimed in claim 2, wherein said predetermined watermark pattern (W2) is embedded with a different sign.

4. (Original) A method as claimed in claim 1, including the step of embedding a further predetermined watermark (W1) to provide a reference for said vector (k).

5.   (Canceled)

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6.   (Currently amended) A method of detecting auxiliary data in an information signal, comprising the steps of:

-     detecting one or more embedded watermarks (W2');

-     determining a vector (k) by which each detected watermark (W2') is shifted with respect to a predetermined watermark (W2); and

-     retrieving said auxiliary data from said vector(s), wherein the embedded watermark (W2') has a dimension less than the dimension of the information signal, the method comprising the step of dividing the information signal with the embedded watermark into subsignals having said dimensions, and adding said subsignals.

7.   (Original)   A method as claimed in claim 6, wherein one of said embedded watermarks is the predetermined watermark pattern (W2), the sign of said predetermined watermark providing a reference for said vector(s).

8.   (Original)   A method as claimed in claim 6, including the step of detecting a further embedded watermark (W1) to provide a reference for said vector(s).

9.   (Original)   A method as claimed in claim 6, wherein the step of detecting an embedded watermark (W2') includes determining the correlation between the information signal and shifted versions of said predetermined watermark (W2), the vector(s) being defined by the shifted version(s) for which said correlation exceeds a given threshold.

10.   (Currently amended) A method as claimed in claim 6, ~~wherein the embedded watermark (W2') has a dimension less than the dimension of the information signal,~~ the method comprising the step of ~~dividing the information signal with the embedded watermark into subsignals having said dimensions, adding said subsignals, and~~ determining the vector (k) by which the embedded watermark (W2') is shifted with respect to a predetermined watermark (W2) having the same dimensions.

11.   (Currently amended) An arrangement for embedding auxiliary data (K) in an information signal (P), comprising:
-    means ~~(13)~~ for shifting one or more predetermined watermark patterns (W2) one or more times over a vector (k), the respective vector(s) being indicative of said auxiliary data (K); and
-    means ~~(12,14)~~ for embedding said shifted watermark(s) (W2') in said information signal, <u>wherein the embedded watermark(s) have</u> <u>dimensions less than the dimension of the information signal, and</u>

the step of embedding comprises repeating said watermark substantially over the extent of the information signal.

12. (Currently amended) An arrangement for detecting auxiliary data in an information signal, comprising:

- means ~~(24 29)~~ for detecting one or more embedded watermarks (W2') that have dimensions less than the dimension of the information signal and are repeatedly embedded substantially over the extent of the information signal;

- means ~~(24 28)~~ for determining a vector (k) by which each detected watermark (W2') is shifted with respect to a predetermined watermark (W2);

- means ~~(29)~~ for retrieving said auxiliary data from said vector(s).

13. (Previously presented) A device for recording and/or playing back an information signal, comprising means for disabling recording and/or playback of the signal in dependence upon auxiliary data embedded in said video signal, wherein the device comprises an arrangement for detecting said auxiliary data as claimed in claim 11.

14. (Currently amended) An information signal (P) with auxiliary data (K) in the form of an embedded watermark (W2'), wherein the

embedded watermark is a shifted version of a predetermined watermark (W2), and wherein the embedded watermark has dimensions less than the dimension of the information signal (P) and is repeatedly embedded substantially over the extent of the information signal (P), the vector (k) over which the predetermined watermark has been shifted being indicative of said auxiliary data.

15. (Currently amended) A storage medium (71) having stored thereon an information signal (P) with auxiliary data (K) in the form of an embedded watermark (W2'), wherein the embedded watermark has dimensions less than the dimension of the information signal (P) and is repeatedly embedded substantially over the extent of the information signal (P), and wherein the embedded watermark is a shifted version of a predetermined watermark (W2), the vector (k) over which the predetermined watermark has been shifted being indicative of said auxiliary data.